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AT  
Docket No.: 9988.057.00  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:

In Hee Han

Customer No.: 30827

Application No.: 10/660,732

Confirmation No.: 2748

Filed: September 12, 2003

Art Unit: 3749

For: **STRUCTURE OF MOTOR SHAFT IN  
CLOTHES DRYER**

Examiner: Stephen M. Gravini

**MS Appeal Brief - Patents**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPELLANT'S BRIEF**

Sir:

In response to a Final Rejection mailed on November 14, 2007 and an Advisory Action mailed on March 28, 2007, a Notice of Appeal was filed April 16, 2007. Appellant hereby submits this Appeal Brief.

The fees required under § 1.17(f) and any required petition for extension of time for filing this brief and fees therefore are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37(c):

- I. Real Party In Interest**
- II. Related Appeals and Interferences**
- III. Status of Claims**
- IV. Status of Amendments**
- V. Summary of Claimed Subject Matter**

**VI. Grounds of Rejection to be Reviewed on Appeal**

**VII. Argument**

**VIII. Conclusion**

**Claims Appendix**

**Evidence Appendix**

**Related Proceedings Appendix**

**I. REAL PARTY INTEREST**

The real party in interest for this appeal is: LG Electronics Inc.

**II. RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

**III. STATUS OF CLAIMS**

Total Number of Claims in the Application.

There is 1 claim pending in this application.

Current Status of Claims:

Claims canceled: 1-8 and 10.

Claims withdrawn from consideration but not canceled: None.

Claims pending: Claim 9.

Claims allowed: None.

Claims rejected: Claim 9.

Claims on Appeal: The claim on appeal is claim 9.

**IV. STATUS OF AMENDMENTS**

The Examiner issued a Final Rejection on November 14, 2006. An Amendment was filed on February 12, 2007, which was not entered as indicated in the first Advisory Action mailed March 5, 2007. A second Amendment was filed on March 14, 2007 canceling claims 1-8 and 10. A second Advisory Action mailed on March 28, 2007 indicated that the March 14 Amendment will be entered. A Notice of Appeal was then filed on April 16, 2007. Accordingly, claim 9 is the only claim pending, which is reflected in the Claims Appendix.

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

The claimed invention is directed to easily dismounting a fan from a motor, for instance, in laundry dryer. As shown in Fig. 2, in a conventional laundry dryer, to dismount a fan 40 from a motor 50, a nut N must be unfastened. While the nut N is being unfastened, however, the shaft 500 rotates with the nut N hindering the nut N from being unfastened. Accordingly, it is difficult to dismount the fan 40 from the motor 50.

As shown in Fig. 4, the claimed invention provides a laundry dryer having a motor bracket 53 fixed to a bottom of the dryer (see, for example, Fig 1), where a motor 50 is mounted on the motor bracket 53, the motor 50 including a motor shaft 500 extending therefrom, and a fan 40 coupled with the motor shaft 500. Paragraph [0028]. The motor shaft 500 includes chamfers (see, for example, Fig. 5, 500a) parallel to each other and configured for facilitating removal of the fan from the motor shaft. Paragraphs [0028]-[0032].

**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

1. Is claim 9 properly rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement?
2. Is claim 9 properly rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 2,547,238 to Tremblay (hereinafter “*Tremblay*”)?
3. Is claim 9 properly rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-9 of U.S. Patent No. 6,874,248 to Hong et al. (hereinafter “*Hong*”) in view U.S. Patent No. 3,264,016 to Torborg (hereinafter “*Torborg*”), U.S. Patent No. 3,264,016 to Reisch (hereinafter “*Reisch*”), and/or U.S. Patent No. 5,664,936 to Cunha (hereinafter “*Cunha*”)?

**VII. ARGUMENT**

**A. The Examiner improperly rejected claim 9 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.**

First, at page 2 of the Office Action, the Examiner alleges that claim 9 recites “chamfers between the fan and motor parallel to each other.” This language is nowhere to be found in claim 9. Rather, claim 9 recites “the motor shaft includes chamfers parallel to each other and configured for facilitating removal of the fan from the motor shaft.”

This appears to be the source of confusion on which the Examiner goes on to allege that claim 9 fails to comply with the written description requirement. The Examiner is simply wrong. Regarding the above-noted features of claim 9, the specification, for example, at paragraph [0032] discloses that “In this instance, since the motor shaft 500 of the present invention has the chamfered parts 500a in the shaft, the chamfered parts 500a can be clamped with a tool....” As

shown in Fig 5, the chamfers are parallel to each other. See Fig. 5, element 500a. See also the specification at paragraphs [0028]-[0029]. Thus, for at least for the reasons discussed above, claim 9 is fully supported by the specification. Therefore, the rejection under 35 U.S.C. § 112, first paragraph, is improper and should be reversed.

**B. The Examiner improperly rejected claim 9 under 35 U.S.C. § 102(b), as being anticipated by *Tremblay*.**

As required in Chapter 2131 of the M.P.E.P., in order to anticipate a claim under 35 U.S.C. §102, “the reference must teach every element of the claim.” “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

As discussed below, *Tremblay* does not expressly or inherently teach every element recited in claim 9. Claim 9 recites, among other features, “the motor shaft includes chamfers parallel to each other and configured for facilitating removal of the fan from the motor shaft.”

In the Office Action at page 4, the Examiner alleges that *Tremblay* discloses that “the motor shaft includes chamfers 98, 100 parallel to each other.” The Examiner is simply wrong.

The American Heritage Dictionary defines “chamfer” as “a flat surface made by cutting off the edge of ... a block of ... material.” This definition is consistent with the description of the chamfer in the specification of the present application, including the corresponding figures, for example, Fig. 5.

Appellant refers to M.P.E.P. §2111.01 to point out that words of a claim must be given their “plain meaning” unless such meaning is inconsistent with the specification.

Specifically, M.P.E.P. §2111.01 states that ordinary, simple English words whose meaning is clear and unquestionable, absent any indication that their use in a particular context changes their meaning, are construed to mean exactly what they say.

With this in mind, what the Examiner is arguing is that a *collar fitting* 98 under a shelf 90, and a *removable ball bearing mounting* 100, which the collar 98 carries, discloses “the motor shaft includes *chamfers parallel to each other*,” (emphasis added). See *Tremblay* at col. 3, lines 40-49.

Referring to Fig. 1 of *Tremblay*, Appellant does not fully appreciate how the collar fitting 98 and the removable ball bearing mounting 100 disclose the recited “chamfers parallel to each other.” In fact, *Tremblay* discloses that the shaft 106 is rotatably mounted to the collar 98. See col. 3, lines 42-46. Thus, this begs the question, why would *Tremblay*’s shaft be chamfered? In fact, *Tremblay*’s Fig. 1 shows that the shaft 106 does not have chamfers at all. Moreover, nowhere in *Tremblay* does it mention that the motor shaft includes chamfers parallel to each other.

Therefore, the rejection under 35 U.S.C. §102(b) as being anticipated by *Tremblay* is improper and should be reversed.

**C. The Examiner improperly rejected claim 9 under the judicially created doctrine of obviousness-type double patenting over claims 1-9 of *Hong* in view of *Torborg*, *Reisch*, and/or *Cunha*.**

The Examiner rejects claims 1-4, 6, and 8-9 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of *Hong* in view of either *Torborg*, *Reisch* and/or *Cunha*. Claims 1-4, 6, and 8 have been canceled, and thus the

rejection with respect to these claims are now moot. Regarding claim 9, however, the Examiner improperly rejected the claim.

First, the Examiner has not clearly articulated in the Office Action how the above references render obvious the features of claim 9.

The Examiner is correct when he states that *Hong* does not claim a chamfer portion. See Office Action at page 5. None of the other references teach or suggest the above-noted features of claim 9 either.

*Torborg* teaches a blower drive shaft 34 that may include an annular groove 35 and a single flat surface 33. See, for example, Fig. 5, and col. 3, lines 53–57. Even if one were to unreasonably interpret a chamfer to cover the flat surface 33 of *Torborg*, *Torborg* still fails to teach another flat surface to which it can be parallel. More importantly, *Torborg* fails to teach chamfers between the fan and the motor. In fact, *Torborg* teaches that the flat surface 33 is located at the distal end of the shaft inside the blower housing (*i.e.*, fan). See col. 3, lines 53–57. Therefore, the flat surface 33 taught by *Torborg* cannot be located between a fan and a motor.

*Reisch* teaches “a pair of grooves 68 and 70 formed on opposite sides of the end of the shaft.” See col. 5, lines 55–57. In *Reisch*, the grooves 68 and 70 are not between the fan and the motor. They are disposed on the shaft where the fan engages the shaft. This is because the fan itself engages the shaft at grooves 68 and 70. See Fig. 16.

*Cunha* teaches a “beveled region of the shaft end 20.” See col. 2, lines 66–67, and Fig. 3. The beveled region on shaft end 20 taught by *Cunha* has a “semi circular shape.” See col. 2, lines 27–28. As such, a beveled region of a shaft having a semi-circular shape cannot be chamfers that are parallel to each other. Parallel chamfers would give the shaft two parallel flat sides, not a semi-circular shape.

Therefore, the rejection under the judicially created doctrine of obviousness-type double patenting is improper and should be reversed.

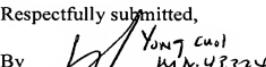
**VII. CONCLUSION**

For reasons as discussed above, claim 9 is improperly rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Claim 9 is improperly rejected under 35 U.S.C. §102(b) as being anticipated by *Tremblay*. Claim 9 is improperly rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-9 of *Hong* in view of *Torborg*, *Reisch*, and/or *Cunha*.

The Honorable Board is requested to reverse the rejections set forth in the final Office Action and direct the Examiner to pass this application to issue.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: June 12, 2007

Respectfully submitted,  
By   
**Mark R. Kresloff**  
Registration No.: 42,766  
McKENNA LONG & ALDRIDGE LLP  
1900 K Street, N.W.  
Washington, DC 20006  
(202) 496-7500  
Attorneys for Applicant

Attachments



**CLAIMS APPENDIX**

**Claims Involved in the Appeal of Application Serial No. 10/660,732**

1.-8. (Canceled)

9. (Previously Presented) A laundry dryer comprising:  
a motor bracket fixed to a bottom of the dryer;  
a motor mounted on the motor bracket, the motor including a motor shaft extending therefrom; and  
a fan coupled with the motor shaft, wherein the motor shaft includes chamfers parallel to each other and configured for facilitating removal of the fan from the motor shaft.

10. (Canceled)

**EVIDENCE APPENDIX**

None.

**RELATED PROCEEDINGS APPENDIX**

None.